

## LA-UR-21-25425

Approved for public release; distribution is unlimited.

Title: RCT: 2.01 RADIOLOGICAL DOCUMENTATION

Author(s): Hill, Matthew Bailey

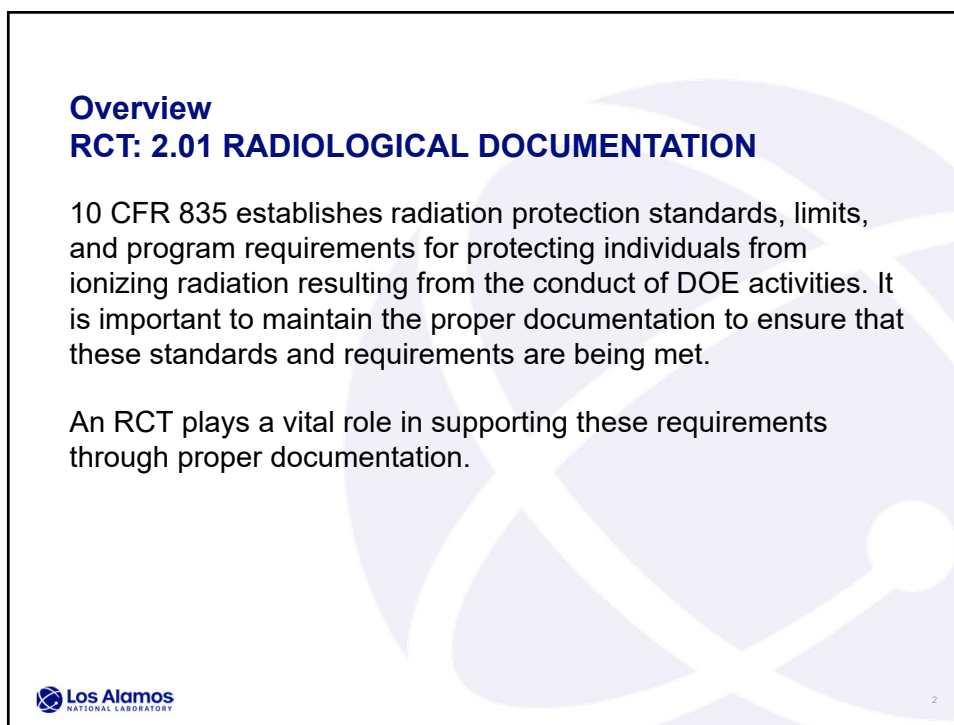
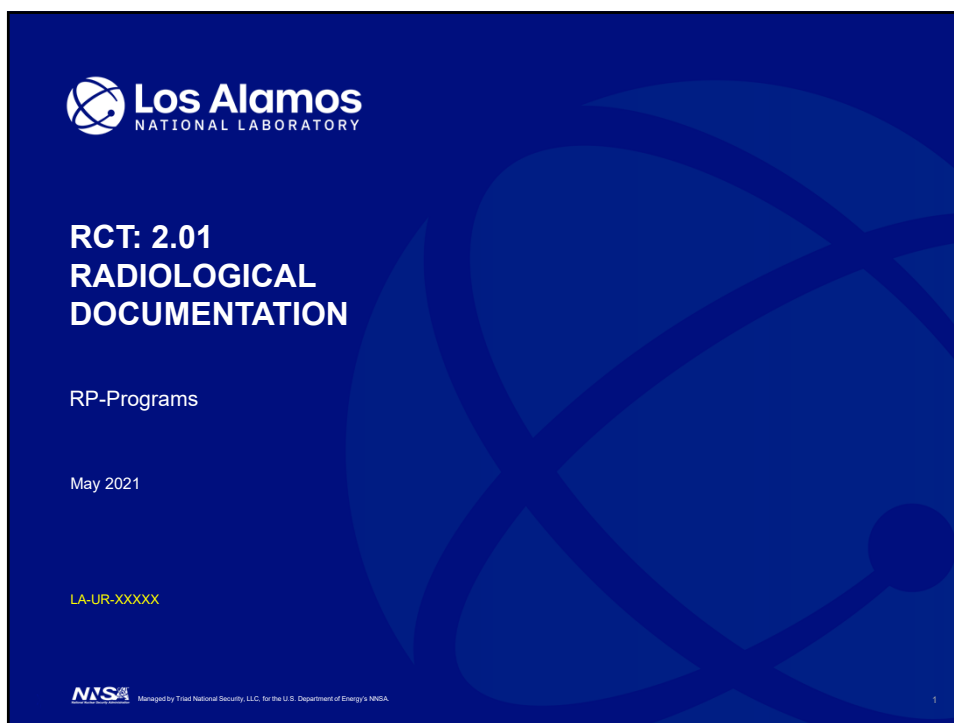
Intended for: Training

Issued: 2021-06-09

---

**Disclaimer:**

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by Triad National Security, LLC for the National Nuclear Security Administration of U.S. Department of Energy under contract 89233218CNA000001. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.



### Terminal Objective

TO1: Given the need to perform duties as an RCT, recognize concepts of radiological documentation that pertain to the RCT position at Los Alamos National Lab in accordance with DOE-HDBK-1122, *Radiological Control Technician Training*.



3

### Enabling Objectives

- EO1: Recognize types of radiological records in use at LANL (2.01.01).
- EO2: Recognize radiological work controls contained within Radiological Work Permits (RWPs) (2.01.02).
- EO3: Describe the RPIN system (2.01.02).
- EO4: Explain the Electronic Document Records Management System and locate RP procedures using the EDRMS or other methods (2.01.03).
- EO5: Explain the requirements for the records management system, such as Quality Control (QC), auditability/retrievability, and management information at LANL (2.01.03).



4

## Section 1: Radiological Control Records

### Radiological Control Record Use

- Radiological control records are needed to demonstrate the effectiveness of the overall Radiation Protection program at DOE facilities

Records are used to:

- Demonstrate the effectiveness of the RP Program
- Document afforded radiological safety
- Plan work
- Evaluate trends
- Guide future performance goals
- Demonstrate regulatory compliance



## Radiological Control Record Use



Records may become the basis for:

- Public disclosures
- Legal proceedings
- Medical assessments
- Audits to show compliance with company, state or federal requirements

**Note:** As Radiation Protection documents are legal records, it is important records be of high quality and readily retrievable.

## LANL Record Qualities

P121, Chapter 20, Article 2011 states radiation protection records shall have the following qualities:

- Maintained to document radiological hazards and conditions and exposures to workers
- Legible, readily retrievable, appropriately protected, and maintained for the prescribed period of time
- Handled to protect personal privacy

### LANL Record Qualities

P121, Chapter 20, Article 2013 states the following types of radiological records must be maintained as required at LANL:

- Radiation Protection Program (RPP) policy documents requirements documents, and procedures
- Individual radiological doses
- Personnel training (course records and individual records)
- As Low As Reasonably Achievable (ALARA) program implementation
- Radiological instrumentation tests, maintenance, and calibration
- Personnel monitoring-device testing, maintenance, and calibration
- Radiological surveys

### LANL Record Qualities

P121, Chapter 20, Article 2013 states the following types of radiological records must be maintained as required at LANL:

- Area-monitoring dosimetry results
- Radiological Work Permits (RWPs)
- Radiological performance indicators and assessments
- Documentation of quality assurance activities
- Radiation Protection Initial Notification (RPINs)
- RSS accountability and control
- Release of material records
- Radiological safety reviews of facility designs, controls, and operations
- Radiation Generating Device (RGD) survey reports

## UTrain

UTrain is the software tool used to access your training info.

- The URL for UTrain is: <https://utrain.lanl.gov/>

The screenshot shows the UTrain web application interface. Annotations with arrows point to specific features:

- Search Bar:** Points to the 'Find Learning' search box at the top left.
- To-Do List Search for a class:** Points to the 'Keywords' input field in the 'To-Do List' section.
- To-Do List Click an item for details and to request or schedule a class:** Points to one of the course cards in the 'To-Do List' section.
- Learning History:** Points to the 'Learning History' section on the right side of the dashboard.

The interface includes sections for 'My Learning', 'To-Do List', 'My Certificate', 'Self Assignment', and 'Learning History'. The 'To-Do List' shows a list of courses with status indicators (e.g., 'REQUIRED', 'COMPLETED').

## Exposure Reports

P121, Chapter 20, Radiation Protection Records and Reports, Article 2022, Personnel Radiological Records

- Procedures, data, and supporting information required to reconfirm an individual's dose at a later date must be maintained
- Individual monitoring records must be maintained and documentation of all occupational doses received during the current year
- Your annual Occupational Radiation Dosimetry Report can be found at: <https://drp.lanl.gov>



## Examples of Forms Used for Documentation

### Instrument Performance Test Log (RP-1-Form-35)

**Los Alamos NATIONAL LABORATORY** Alpha Survey Instrument Performance Test Log

Instrument Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_ HSER (P/N): \_\_\_\_\_ Cal Due Date: \_\_\_\_\_

Performance Test Reference Source  
☐ ACS-5 Calibrator ☐ TMA/Eberline ☐ Other: \_\_\_\_\_

Check Source  
 ID #: \_\_\_\_\_  
 Isotope: \_\_\_\_\_  
 Activity: \_\_\_\_\_  
 Reference: \_\_\_\_\_  
 ± 20%: \_\_\_\_\_

ID: \_\_\_\_\_ Filter Position or Range: 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_  
 Isotope: \_\_\_\_\_ Reference Reading: \_\_\_\_\_  
 Activity: \_\_\_\_\_ Acceptance Range (± 20%): / / / / ± 20%: \_\_\_\_\_

Date Reference Readings Established \_\_\_\_\_ RCT Name \_\_\_\_\_ Signature \_\_\_\_\_ Z Number \_\_\_\_\_

Date/Time	Background	Reference Reading Scale 1	Reference Reading Scale 2	Reference Reading Scale 3	Reference Reading Scale 4	Check Source Reading	Pass/Fail	Printed Name/Signature	Comments

## Examples of Forms Used for Documentation

### Instrument Check Tag (RP-PROG-FORM-041)

RP-PROG-041, r2 Cal Due: \_\_\_\_\_

**INSTRUMENT CHECK TAG**

Instrument: \_\_\_\_\_

Inst #: \_\_\_\_\_ Detector: \_\_\_\_\_

Source ☐ N/A – Field Op Check Only

Serial #: \_\_\_\_\_ Nuclide: \_\_\_\_\_

Ref Range: \_\_\_\_\_ / \_\_\_\_\_  $\alpha / \beta$


Ref Range: \_\_\_\_\_ / \_\_\_\_\_  $\alpha / \beta$

Initial	Date	Initial	Date	Initial	Date



## Examples of Forms Used for Documentation

### Contaminated Person Survey (RP-PROG-FORM-036)



**Contaminated Person Survey**  
Skin Contamination

Date: \_\_\_\_\_ Time of Initial Survey: \_\_\_\_\_ TA: \_\_\_\_\_ Building: \_\_\_\_\_ Room: \_\_\_\_\_

Instrument: \_\_\_\_\_ Instrument Number: \_\_\_\_\_ Calibration Due Date: \_\_\_\_\_

Survey Point	Nuclide (if known)	Initial Contamination (dpm)	Contamination After Decon (dpm)	Estimated Contamination Surface Area (cm <sup>2</sup> )	Hot Particle Y/N	Estimated Exposure Time (min)

Comments (e.g., decon method, location details, RPN or RRP #): \_\_\_\_\_

By signing this, I have been briefed by Radiation Protection personnel on the skin contamination that has occurred, if there are any other questions regarding the risks associated with the skin contamination levels, contact the RP-PROG Dosimetry Team at 667-4854.


Contaminated Person (Print) \_\_\_\_\_ Signature \_\_\_\_\_ Z Number \_\_\_\_\_ Group \_\_\_\_\_ Date \_\_\_\_\_

Radiation Control Technician (Print) \_\_\_\_\_ Signature \_\_\_\_\_ Z Number \_\_\_\_\_ Group \_\_\_\_\_ Date \_\_\_\_\_

RP-PROG-FORM-036, Rev. 5 Page 1 of 2 11/23/2020

## Examples of Forms Used for Documentation

### Dose Tracking Log (RP-PROG-FORM-084)



**Collective Dose Tracking**

RWP Number: \_\_\_\_\_ Collective Dose Limit (mrem): \_\_\_\_\_

75% of Dose Limit (mrem): \_\_\_\_\_ 90% of Dose Limit (mrem): \_\_\_\_\_

Date	Collective Daily Dose (mrem)	Running Total Dose <sup>1</sup> (mrem)	<75% Y/N	<90% Y/N	RCT Z Number	HPFC Z Number	Collective Daily Limit <sup>2</sup>

## Examples of Forms Used for Documentation

### Health Physics Radioactive Material Survey (HPRMS) Tags

## Examples of Forms Used for Documentation

### HPAL submittal form (RP-SVS-HPAL-FORM-001)

## Examples of Forms Used for Documentation

### HPAL Analysis Report

- Routine or special sample analysis generally performed at the Health Physics Analysis Laboratory (HPAL)

HPAL ANALYSIS REPORT			
FILE: 123456			
Sample Description	Analysis Information	Contact Information	
Urgin Date: 03/23/21	Instrument: BQ-10	Name: Curt Tech	
Sample Type: Chemical	Analysis: Isotopic	Phone: 655-0123	
Location: TA-48 Bldg. 1	Date: 03/26/21		
Access: A07C115	Analyst: J. Miller, Elizabeth		
Priority: Routine			
Analyst Comments:			
Sample ID or Description: Sample #4.			
Submitter Comments:			
None			
Isotope	Activity	2 $\sigma$	MDA
Co-60		sigma	
	(dpm/ml)	(uCi)	(dpm/ml)
None	NDA	NDA	NDA

## Section 2: Records and Reports at LANL

## Examples of Records and Reports at LANL

Examples of radiological records and reports are:

- Radiological Work Permits (RWPs)
- Radiation Protection Initial Notification (RPIN)
- Contamination survey (LAS, smear, and/or direct)
- Radiation survey for external radiation
- Air sample survey
- Tritium survey (H-3)
- Environmental surveys (Soil, Water)
- Nasal smears
- Item release surveys (including release logs)
- Incoming and outgoing RAM shipment surveys
- Area or room surveys
- RP owned RAM (respirators, instruments, samples, etc.)
- Exposure records

## Records and Reports at LANL - RWPs

When are RWPs required?

P121, Chapter 11, *Radiological Work Control*

Table 11-3. Entry Requirements by Area Designation	
Areas	Entry
Radiation Area (RA) Contamination Area (CA) High Radiation Area (HRA) 0.1 to 1 rem in 1 hr @ 30 cm	In accordance with the FRPR (if established) or a Radiological Work Permit (RWP), including Radiological Worker (RW) as minimum training
HRA >1 rem in 1 hr @ 30 cm Very High Radiation Area (VHRA) High Contamination Area (HCA) Airborne Radioactivity Area (ARA) Hot Job Exclusion Area <sup>a</sup> (HJEA)	RWP is required for entry into these areas. Requirements in <a href="#">Article 1124</a> also apply.
<sup>a</sup> When HJEA is established to control access during planned radiological work, an RWP is required for entry. When established in response to an emergency situation, emergency response procedures are used, including those for access control.	

## Records and Reports at LANL - RWP

P121, Chapter 11, *Radiological Work Control*

Table 11-4. Radiological Work Permit (RWP) and Integrated Work Document (IWD) Decision Requirements for Radiological Work	
Hazard Grading Questions	Examples
<p>Does the work involve any of the following?</p> <ul style="list-style-type: none"> <li>• Work that could contaminate uncontrolled areas or the environment;</li> <li>• Work in (or likely to create) an Airborne Radioactivity Area (ARA) with levels &gt;40 derived air concentration (DAC);</li> <li>• Dose Rate &gt;1 rem/hr in the work area (equivalent dose to whole body, at 30 cm from accessible surfaces);</li> <li>• Extremity / shallow dose rate &gt;10 rem/hr (considering all radiations, at contact with accessible material or device); or</li> <li>• Work expected to create uncharacterized radiological conditions, including: <ul style="list-style-type: none"> <li>– working outside engineered controls, or</li> <li>– breaching engineered containment systems.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Remediation of legacy contamination in proximity to uncontrolled areas</li> <li>• Decontamination of liquid waste containment systems</li> <li>• Opening a highly contaminated radioactive material shipment</li> <li>• Retrieving, packaging, shipping, and receiving high activity activation products</li> <li>• Breach of internally contaminated systems where the breach could create an airborne radioactivity hazard, including maintenance or troubleshooting activities on actinide hoods, gloveboxes, and associated ventilation systems</li> <li>• Decontamination and demolition of radiological facilities or contaminated systems</li> </ul>
<p>YES – This is <b>High-Hazard</b> radiological work, and an Integrated Work Document (IWD) and Radiological Work Permit (RWP) are required.</p> <p>NO – Continue with questions below.</p>	

## Records and Reports at LANL - RWP

P121, Chapter 11, *Radiological Work Control*

Table 11-4. Radiological Work Permit (RWP) and Integrated Work Document (IWD) Decision Requirements for Radiological Work	
Hazard Grading Questions	Examples
<p>Does the work involve any of the following?</p> <ul style="list-style-type: none"> <li>• Dose Rate &gt;5 mrem/hr and &lt;1 rem/hr (equivalent dose to the whole body, at 30 cm from accessible surfaces);</li> <li>• Extremity / shallow dose rate &gt;50 mrem/hr and &lt;10 rem/hr (considering all radiations, at contact with accessible material or device);</li> <li>• Work in (or likely to create) a High Contamination Area (HCA);</li> <li>• Work in (or likely to create) a Contamination Area (CA); or</li> <li>• Work in (or likely to create) an Airborne Radioactivity Area (with levels between 1 and 40 DAC or &gt; 12 DAC-hr in a week).</li> </ul>	<ul style="list-style-type: none"> <li>• Use of an accountable source with a dose rate greater than 5 mrem/hr at 30 cm to performance test health physics instruments</li> <li>• Routine handling of dispersible radioactive materials within intact engineered controls, where the activity and work area are stable, well-characterized, controlled in accordance with the Facility Radiation Protection Requirements document (FRPR), and where sustained performance demonstrates effective controls (such as routine glovebox work).</li> </ul>
<p>YES – This is <b>Moderate-Hazard</b> radiological work, and an IWD (or "qualified worker") and either an RWP or FRPR (for routine, stable, well-characterized conditions) are required. See Table 11-3 for RWP thresholds; work with a high activity radioactive sealed source (RSS) &gt;100 mrem/hr at 30 cm requires an RWP.</p> <p>NO – Continue with questions below.</p>	

## Records and Reports at LANL - RWP

A Radiological Work Permit (RWP) is a document that is associated with control of work involving radioactive material and/or radiation hazards.

Documentation associated with a RWP includes:

- The RWP document itself
- The RWP Pre-Job Briefing Log
- Pre, During, and Post-job Surveys
- Dose Records

## RWPs

### Parts of a RWP



## RWPs

### Important parts of a RWP

**EPD Dose and Dose/Rate Settings are derived from Rad Conditions**

**Work Location(s)**

Electronic Dosimeter Settings			
Gamma Dose (mrem)	Gamma Rate (mrem/hr)		
330	450		
Beta Dose (mrem)	Beta Rate (mrem/hr)		
N/A	N/A		
Neutron Dose (mrem)	Neutron Rate (mrem/hr)		
N/A	N/A		

Location(s)		
TA	Building	Area Description
53	8	PSR, Zone 2

If suspension limits are met stop work, place job in a safe condition, cease use of the RWP as written, and notify Job Supervisor and Radiological Control Supervision.

Condition	Expected	Suspension Limit	Unit
Beta-Gamma Contamination	100,000	300,000	dpm/100cm <sup>2</sup>
Extremity Dose	200		mrem
Anticipated Radionuclide(s)	MAPs, Bs-7		Nuclide
Whole Body Dose Rate (n+g+b) @ 30cm	300	450	mrem/hr
Extremity Dose Rate (Contact)	1000	1500	mrem/hr

**Expected Radiological Conditions**

**Suspension Limits Derived from expected conditions**

## RWPs

### Important parts of a RWP

**LANSCÉ**  
**RADIOLOGICAL WORK PERMIT**

RWP Title	RWP Number and Revision
LANSCÉ: PSR Stripper Foil Repair	21-0282 Rev. 01

**Radiological Requirements**

**BIOASSAY**  
IN VIVO BIOASSAY ENROLLMENT

**COVERAGE**  
CONTINUOUS COVERAGE

**DOSIMETRY**  
WRIST EXTREMITY DOSIMETER: Wrist dosimetry is required for hands on work.  
EPD (M&C)  
TLD

**ENGINEERING CONTROLS**  
LEAD SHIELDING: Lead blankets should be placed on components readings greater than 100 mrem/h @ 30 cm if feasible.

**PRE-JOB BRIEF FREQUENCY**  
DAILY BRIEFING

**PROTECTIVE CLOTHING**  
LEVEL 2 PPE WITH HOOD: Outer layer OREX ULTRA, inner layer OREX DELUXE. Modesty garments must be worn under PPE.

**RESPIRATORY PROTECTION**  
AIR PURIFYING RESPIRATOR (APR)  
POWERED AIR PURIFYING RESPIRATOR (PAPR)

**TRAINING**  
RADWORKER II TRAINING  
APR TRAINING: Only required for workers wearing APR.  
PAPR TRAINING: Only required for workers wearing a PAPR.  
OTHER TRAINING: TA-53 Site Specific/Facility Specific

**Radiological Requirements Job coverage requirements are based on expected radiological conditions**

## RWPs

### Important parts of a RWP

**Special Instructions**  
Additional info  
needed for proper  
job-coverage

**Approval Signature Block**  
May have multiple  
signatures

Los Alamos NATIONAL LABORATORY		
<b>LANSCE RADIOLOGICAL WORK PERMIT</b>		
<b>RWP Title</b>		<b>RWP Number and Revision</b>
LANSCE PSR Stripper Foil Repair		21-0282 Rev: 01
<b>Special Instructions</b>		
<p><b>Hold Points:</b> If EPD alarms immediately exit the area and contact RCT supervisor.</p> <p>If stripper foil is broken or dropped during replacement, pause work, have RCT verify contamination levels have not exceeded the suppression limit.</p> <p><b>Instructions:</b> RCT shall indicate low dose areas for staging of personnel and equipment.</p> <p>Respiratory protection required for all of step #6 of IWD #6671. After step #6 is completed, respiratory protection requirements may be eliminated when contamination levels are confirmed to be &lt;100,000 dpm/100 cm<sup>2</sup>.</p> <p>Workers will follow RCT instruction on where to doff their PPE, and immediately proceed to the nearest PCM for a final survey.</p> <p>All items/tools, etc will be surveyed by RCT prior to being removed from the area.</p> <p>Nasal smears are required if contamination is found on head, neck, face, shoulders or chest.</p> <p>Turn in EPD daily.</p> <p><b>Work Area Configuration:</b> Area will be posted as an HZEA.</p> <p> Lay down plastic for contamination control.</p> <p><b>Instruments:</b> Gaeffle air sampler</p> <p>NaI (44-3) detector for Be-7 potential</p> <p><b>Other Instructions:</b> Fire or Medical: 9-1-1 Emergency Management: 667-2400 DESH-LFO/TA-33 Field Office: 667-7069 or intercom "RP" line</p>		
<b>Approval</b>		
<b>Printed Name</b>	<b>Signature</b>	<b>Date</b>
RCT Supervisor	<< Signature on File >>	04/20/2021
HPFC		

## RWPs

### Important parts of a RWP

**Briefing Log**  
RWP Info Area

**Briefing Signature Area**  
Ensure workers  
sign after brief  
The last two  
blocks are for  
the RCT giving  
the brief

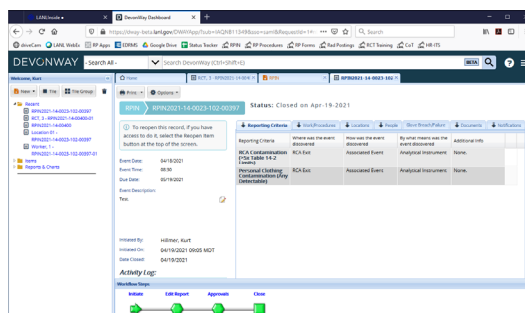
Los Alamos NATIONAL LABORATORY						
<b>RWP PRE-JOB BRIEFING LOG</b>						
<b>RWP #</b>	<b>Revision #</b>	<b>RWP Title</b>	<b>Expiration Date</b>			
21-0282	01	LANSCE PSR Stripper Foil Repair	12-31-2021			
<b>Location(s)</b>						
<b>F4</b>	<b>Building</b>	<b>PSR, Zone 2</b>		<b>Area Description</b>		
53	5					
<b>Work Description</b>						
Remove and replace the top stripper-foil ladder of (2 new foil targets installed), replace view-ports, repair foil periscope and camera, replace SRIP02 and its isolation valve, replace cryo-pump and its isolation valve, replace 2.75" CF viewport, Repair SRIP02 solenoid, install a Convection gauge above the cryo-pump.						
I have been briefed, understand, and I will implement all hazards/controls/training defined by this RWP.						
<b>Z#</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>	<b>Task #</b>	<b>Z#</b>	<b>RCT Initials</b>

**Note:** The pre-job briefing log is a record and must be signed by both the person giving and receiving the brief.

## Radiation Protection Initial Notification (RPIN)

The Radiation Protection Initial Notification (RPIN) system is an application to capture, document, and record radiological conditions, metrics, and/or incidents at LANL. To access the RPIN system use the Radiation Protection Applications Catalog (RPAC). The URL for RPAC is: <https://rpac.lanl.gov>

- Limited distribution to facility and management stakeholders
- Initial notification sent immediately
- May take up to 30 days to close



**Note:** All RCTs will receive RPIN training prior to qualification.

## Section 3: Records Management System Requirements

## Radiation Protection Resources

The Electronic Document Records Management System (EDRMS) is the official records repository for LANL. All RCT candidates will be granted access as part of their initial training.

- The URL for EDRMS is: <https://edrms.lanl.gov/>
- On the home screen select "Centralized Repository"

## LANL Official Records Repository

RP Programs procedures, forms, and other records are located in the RP-PROG folder and its sub-folders.

**Search Bar**  
The drop down offers search parameters

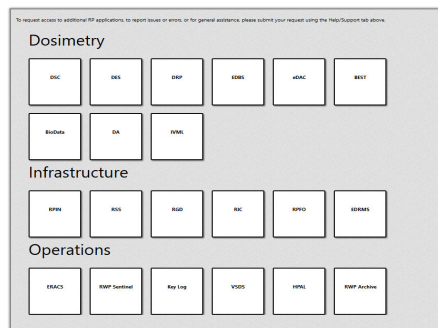
**Path Description**

**Selected Item**  
Left clicking will automatically open item in download folder

## Radiation Protection Resources

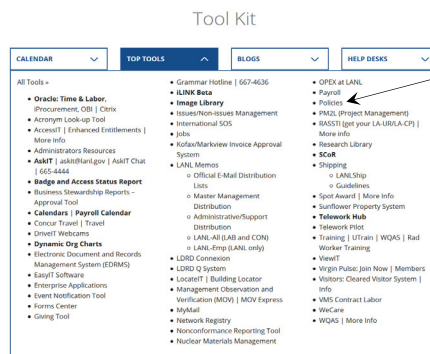
RP software and computer programs can be found at the Radiation Protection Applications Catalog (RPAC). Click on the desired link to open the application.

- The URL for RPAC is: <https://rpac.lanl.gov>



## LANL Policy Documents

LANL policy documents can be found on the LANL homepage in the "Top Tools" area.

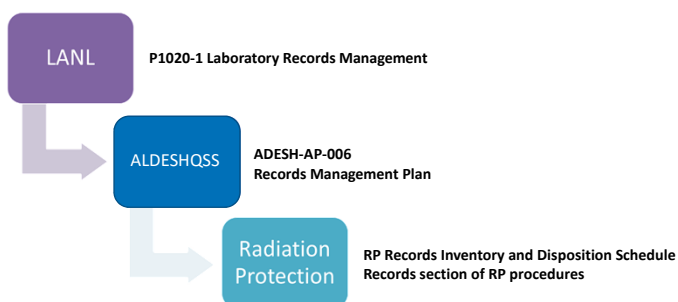


**Note:** P-121 can also be located by using the search bar on the LANL homepage.

## LANL Records Guiding Documents

Documents in the Records Management Program should be managed in a consistent, cost-effective, compliant, and value-added manner.

The documents below implement the laboratory records system.



## Performance Assurance

There are three primary Radiation Protection performance assurance processes at LANL: The 10 CFR 835 Triennial Assessment, Radiation Protection Initial Notifications (RPINs), and Radiation Protection metrics (contained within the RPIN system).

- The Triennial Assessment is an internal audit of the Radiation Protection Program (RPP)
- The Radiation Protection Initial Notification (RPIN) system is an application to capture, document, and record radiological conditions, metrics, and/or incidents at LANL

## Records Management System Requirements

### General Records Requirements:

- Document all records in black or blue ink
- For corrections (as near as possible to the lined out information)
  - Draw a single line through the incorrect information
  - Provide initials of the individual making the correction
  - Provide the date of the correction
  - Record the correct information, as applicable
- Records shall be made in such a manner that they provide sufficient detail to be understood by personnel who were not present at the time of entry
- Ensure every space is filled in and no spaces are left empty
  - If a portion of the record is not used you may use "N/A", /, --, or xxx
- The use of arrows to signify continuous data or unused spaces is not permitted

## Records Management System Requirements

### General Logbook Requirements:

- Area logbooks shall be maintained for each facility where DESH performs radiation protection activities
- Log entries shall:
  - Contain only fact, pertinent data, and the time of entry
  - NOT contain conjectures, opinions, and unrelated information
  - NOT contain classified information or Personally Identifiable Information (PII)
- Close out logbooks at the end of the calendar year and initiate new logbooks at the start of each calendar year

## Records Management System Requirements

### General Logbook Requirements:

- The following are required to be recorded into a logbook:
  - Abnormal or upset facility conditions affecting safety
  - Responses to indication of radon
  - Changes to radiological postings/conditions
  - Radiological incidents or occurrences that were not recorded in Radiation Protection Initial Notifications and emergency actions taken
  - Failure to complete compliance activities within the required time-frame and the actions taken and personnel notified
  - Radiological alarms, NOT including spurious alarms from hand-held personnel contamination monitors, e.g. Ludlum 214

## Enabling Objectives Review

- ✓ EO1: Recognize types of radiological records in use at LANL.
- ✓ EO2: Recognize radiological work controls contained within Radiological Work Permits (RWPs).
- ✓ EO3: Describe the RPIN system.
- ✓ EO4: Explain the Electronic Document Records Management System and locate RP procedures using the EDRMS or other methods.
- ✓ EO5: Explain the requirements for the records management system, such as Quality Control (QC), auditability/retrievability, and management information at LANL.



## Questions?

